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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,048	01/22/2001	Rajesh Ramankutty	00-1070	4450
7.	590 09/14/2004		EXAMINER	
McDonnell Boehnen Hulbert & Berghoff			WAHBA, ANDREW W	
32nd Floor 300 S. Wacker	Drive		ART UNIT	PAPER NUMBER
Chicago, IL 60606			2661	
			DATE MAILED: 09/14/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

			<i>(</i> 1
	Application No.	Applicant(s)	
	09/767,048	RAMANKUTTY ET AL.	
Office Action Summary	Examiner	Art Unit	
	Andrew W Wahba	2661	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed // rs will be considered timely. It the mailing date of this communication. ED (35 U S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on 01/2	2/2001.	V	
<u> </u>	s action is non-final.		
3) Since this application is in condition for alloware closed in accordance with the practice under E			
Disposition of Claims			
4) ☐ Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-14 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.		
Application Papers			
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 01/22/2001 is/are: a)☐ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Example 11.	accepted or b) objected to by drawing(s) be held in abeyance. Set tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119		•	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. Is have been received in Applicationity documents have been received u (PCT Rule 17.2(a)).	ion No ed in this National Stage	
Attachment(s)	_		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ☐ Interview Summary Paper No(s)/Mail D		
<ul> <li>2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>05/30/01</u>.</li> </ul>		Patent Application (PTO-152)	

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howes et al (US Patent 6,366,558) in view of Loehndorf (US Patent 6,094,437).

With regard to claims 1, 4, 5, 9, 10 and 14, Howes et al discloses an active local director 404 (primary LNS) and a standby local director 406 (peer LNS) that communicate between a group of physical machines (CPE) and the Internet 400 via a switch 408 (LAC to a network) (column 9, lines 52-57 and column 10, lines 5-8). The active local director 404 (primary LNS) and a standby local director 406 (peer LNS) maintain a RS-232 link that is used to transfer (determining) configuration information (state information) (column 9, lines 57-62). Accordingly, a first information may be transmitted through the active local director 404 and a second information may be transmitted through the standby local director 406.

Howes et al does not disclose or fairly suggest the establishing of a establishing a first tunnel or second tunnel to transmit a first or second information.

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Loehndorf, Jr. et al disclose a L2TP Access concentrator (LACs) and L2TP network servers (LNSs) that are attached to a L2TP tunnel (first and second tunnel) merging and management service (LTM) 20 (column 8, line 23-26).

A person of ordinary skill in the art to which the invention pertains would have been motivated to employ Loehndorf, Jr. et al in Howes et al to achieve load balancing in a system that employs tunneling. As described by Loehndorf, Jr. et al tunneling is widely used in modern day communications (column 1, lines 19-21) for the purpose of encapsulating the data of a first network while the data is transmitted across a second network, such as the Internet (column 1, lines 43-48). At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Howes et al with Loehndorf, Jr. et al (collectively Howes-Loehndorf) to obtain the invention as specified in claims 1, 4, 5, 9, 10 and 14.

With regard to claim 2, the active local director 404 and a standby local director 406 maintain a RS-232 link that is used to transfer (requesting) configuration information (column 9, lines 57-62).

With regard to claim 3 and 8, as result of the transfer step either the active local director 404 or standby local director 406 will be inoperable (detecting/determines). By transmitting to the appropriate local director 404 or 406, the switch 408 confirms the switchover and communicates with an active channel. As explained by Howes et al, there are many ways to define a state as active (column 10, 15-18).

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With regard to claim 6 and 7, it is inherent that the switch 408 (LAC) receives switchover requests. Otherwise, the switch 408 would not communicate with the correct local director 404 or 406. Accordingly, the switch 408 may confirm (reply) the switchover. By transmitting to the appropriate local director 404 or 406, the switch 408 confirms the switchover.

With regard to claim 11 and 12, it is inherent that the switch 408 communicates with the appropriate local director 404 or 406. By transmitting to the appropriate local director 404 or 406, the switch 408 confirms the switchover and communicates with an active channel. As explained by Howes et al, there are many ways to define a state as active (column 10, 15-18).

With regard to claim 13, Howes et al discloses a group of physical machines (CPE) that communicate a switch 408 (access concentrator) (column 10, lines 5-8).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (571) 272-3081. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information

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for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Wahba

August 30, 2004

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

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